

Amendments to the Claims:

Please amend the claims to read as follows. This listing of claims replaces all prior versions and listings of claims in the application:

1. (Withdrawn) A micro-pattern embedded optical film that supports growth, identification and measurement of cells.
2. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains straight and curved geometric shapes.
3. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains numbers.
4. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains letters.
5. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern has dimensions that range from sub-micron to 5 millimeters.
6. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains a coordinate system wherein each location on said optical film may be identified by a set of numbers or letters or combination of numbers and letters.
7. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains a first side and a second side, wherein said first side contains embedded micro-patterns, wherein said second side contains no micro-pattern.
8. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said micro-pattern contains a first side and a second side, wherein said first side and said second side both contain embedded micro-patterns.
9. (Withdrawn) The micro-pattern embedded optical film as defined in claim1, wherein said optical film has a plastic substrate.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Currently amended) A device for growth, identification and measurement of cells comprising:

a micro-pattern embedded plastic optical film having a plurality of regions formed by contrast features, each of said regions having a unique identifier ~~and~~, each of said contrast features having a depth or a height less than five microns and being observable during microscopic viewing; and

a supporting component bonded to said micro-pattern embedded plastic optical film to form a volume for holding a liquid having said cells.

15. (Previously presented) The device as defined in claim 14, further comprising a base film.

16. (Previously presented) The device as defined in claim 14, wherein said micro-pattern embedded optical film and said supporting component are bonded by an adhesive layer.

17. (Previously presented) The device as defined in claim 16, wherein said adhesive layer comprises a pressure sensitive adhesive.

18. (Previously presented) The device as defined in claim 16, wherein said adhesive layer comprises an energy curable adhesive.

19. (Previously presented) The device as defined in claim 14, wherein said supporting component has a shape defining a plurality of wells each adapted for performing an assay.

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Previously presented) The device as defined in claim 15 wherein said base film is a plastic substrate.

24. (Previously presented) The device as defined in claim 23 wherein said plastic substrate is a flexible substrate.

25. (Currently amended) A device for growth, identification and measurement of cells comprising:

a micro-pattern embedded plastic optical film having a plurality of regions formed by contrast features, each of said regions having a unique identifier, each of said contrast features having a depth or a height less than five microns; and

at least one supporting component attached to said micro-pattern embedded plastic optical film to form a plurality of assay locations for holding liquid having said cells, wherein said cells and said contrast features are observable during microscopic viewing without refocusing.

26. (Previously presented) The device as defined in claim 25 wherein said at least one supporting component is formed on said micro-pattern embedded plastic optical film using a material deposition technique.

27. (Previously presented) The device as defined in claim 25 wherein said at least one supporting component is bonded to said micro-pattern embedded plastic optical film.

28. (Currently amended) A micro-pattern embedded plastic optical film having a plurality of regions formed by contrast features, each of said regions having a unique identifier, each of said contrast features having a depth or a height less than five microns, said micro-pattern

embedded plastic optical film adapted for attachment to at least one supporting component to form at least one volume for holding a liquid having said cells wherein said contrast features and said cells are simultaneously observable during microscopic observation.

29. (Currently amended) The micro-pattern embedded plastic optical film as defined in claim 28 further comprising a base layer, wherein said micro-pattern embedded plastic optical film comprises a clear plastic layer having a thickness less than said ~~and a base layer, said clear plastic layer having said contrast features and said unique identifiers.~~

30. (New) A device for growth, identification and measurement of cells comprising:

a micro-pattern embedded plastic optical film having a plurality of regions formed by contrast features, each of said regions having a unique identifier, each of said contrast features being observable during microscopic viewing and having a depth or a height less than a dimension of the cells to allow cell growth and cell mobility across the contrast features; and

a supporting component bonded to said micro-pattern embedded plastic optical film to form a volume for holding a liquid having said cells.

31. (New) The device as defined in claim 30 wherein a depth or a height of each of said contrast features is less than five microns.

32. (New) The device as defined in claim 14, wherein each of said contrast features has a depth or a height of less than one micron.

33. (New) The device as defined in claim 25, wherein each of said contrast features has a depth or a height of less than one micron.

34. (New) The micro-pattern embedded plastic optical film as defined in claim 28, wherein each of said contrast features has a depth or a height of less than one micron.

35. (New) The device as defined in claim 30, wherein a depth or a height of each of said contrast features is less than one micron.